ABSTRACT

A coated metal surface on a solid support, wherein the coating consists of a protein layer firmly attached to the metal surface, and said protein layer is coupled to linker molecules that are bound to low molecular weight antigens, wherein the linker molecules are coupled to the protein layer and are bound to the antigen via functional end groups and contain between the functional end groups an aliphatic hydrocarbon of 1, 2 or 3 carbon atoms, and wherein the antigens are optionally reversibly bound to antibodies specific for the antigens, is described. The coated metal surface on a solid support may be used in a method of detecting analyte antigens as part of an analysis device, such as a Piezoelectric Crystal Microbalance device or a Surface Plasmon Resonance biosensor, for detection in an aqueous solution of an analyte antigen with higher affinity to an antibody than the antigen of the coating by monitoring the displacement of the antibody from the coating.